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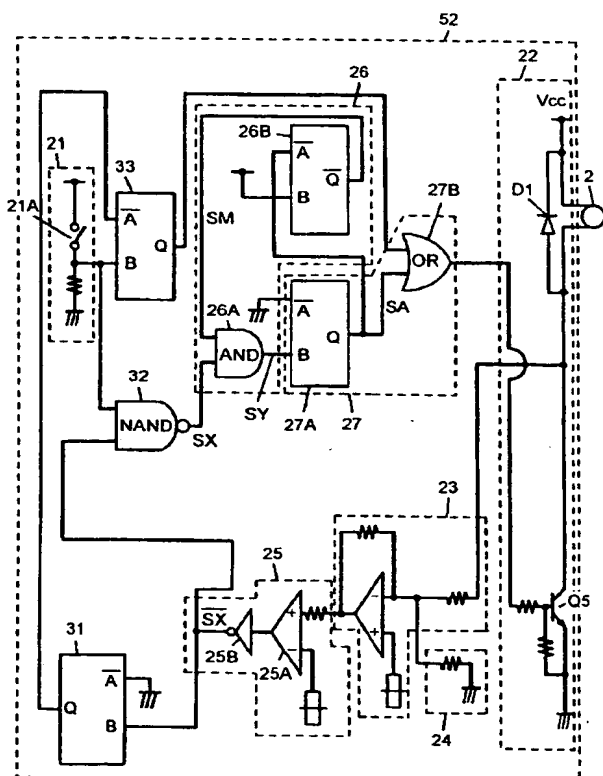
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(54) Title: **VIBRATION LINEAR ACTUATING DEVICE, METHOD OF DRIVING THE SAME DEVICE, AND PORTABLE INFORMATION APPARATUS USING THE SAME DEVICE**



(57) Abstract: A vibration linear actuating device includes a vibrating linear actuator and a driver (52) for driving actuator. Actuator includes mover having permanent magnet magnetized in a radial direction, stator having coil (2) and facing the permanent magnet, and elastic body for coupling stator to mover. The driver includes driving section having switching element (Q5) for powering coil (2), output controller (27) for controlling switching element (Q5), zero-cross detector (25) for detecting a zero-cross point of back electromotive force generated in coil (2) and having an output to be fed back to the output controller (27). In this structure, the driver powers coil (2) in one way to keep mover vibrating in corporation with elastic body.

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